Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Currently Amended) A method for producing a transgenic cotton plant comprising the steps of:
 - (a) obtaining cotton petiole explants,
 - (b) exposing the petiole explants to a culture of Agrobacterium tumefaciens that harbors a vector comprising an exogenous gene and a selectable marker, the Agrobacterium being capable of effecting the stable transfer of the exogenous gene and selection agent resistance gene to the genome of the cells of the petiole explant,
 - (c) culturing the petiole explants to induce callus formation,
 - (d) selecting a transformed callus that expresses the exogenous gene,
 - (e) culturing the selected callus in suspension culture to induce formation of embryoids, and
 - (f) regenerating the embryoids into an embryoid to obtain a whole transgenic cotton plants plant.

- 2. (Currently Amended) The method of claim 1, wherein the petiole explants are precultured for a period of time prior to exposure to the culture of *Agrobacterium* tumefaciens.
- 3. (Currently Amended) The method of claims claim 1, wherein the culture media used in steps (b)-(e) have glucose as the sole carbon source.
- 4. (Currently Amended) The method of claim 3, wherein the glucose is in an amount at a concentration of about 10 g/l to about 50 g/l.
- 5. (Currently Amended) The method of claim 4, wherein the glucose is in an amount at a concentration of about 30 g/l.
- 6. (Currently Amended) The method of claim 1, wherein the culture media used in steps (b) and (d)-(f) do not contain hormones.
- 7. (Currently Amended) The method of claim 1, wherein the embryoids embryoid germination regeneration of step (f) is carried out in a medium having a source of nitrogen selected from the group consisting of asparagine, glutamine or both asparagine and glutamine.

- 8. (Currently Amended) The method of claim 7, wherein the source of nitrogen is in an amount at a concentration of about 700 mg/l to about 5 g/l.
- 9. (Currently Amended) The method of claim 8, wherein the source of nitrogen is in an amount at a concentration of about 3.8 g/l.
- 10. (Currently Amended) The method of claim 7, wherein the source of nitrogen is both asparagine and glutamine, and the asparagine is in an amount at a concentration of about 200 mg/l to about 1 g/l and the glutamine is in an amount at a concentration of about 500 mg/l to about 2 g/l.
- 11. (Currently Amended) The method of claim 10, wherein the asparagine is in an amount of about 500 mg/l and the glutamine is in an amount at a concentration of about 1 g/l.
- 12. (Currently Amended) The method of claim 1, wherein the suspension culture of step (e) has a duration of less than about 20 days.
- 13. (Currently Amended) The method of claim 12, wherein the suspension culture of step (e) has a duration of about 10 days to about 20 days.

- 14. (Currently Amended) The method of claim 13, wherein the suspension culture of step (e) has a duration of about 14 days.
- 15. (Currently Amended) The method of claim 1, wherein step (c) is carried out in the presence of low concentration concentrations of one or more hormones.
- 16. (Currently Amended) The method of claim 15, wherein the concentration of any one hormone ranges is from 0 to about 1 mg/l.
- 17. (Currently Amended) The method of claim 15, wherein step (c) is carried out in the presence of 2,4-dichlorophenoxacetic 2,4-dichlorophenoxyacetic acid in at a concentration ranging from 0 to about 0.5 mg/l and kinetin in at a concentration ranging from 0 to about 1 mg/l.
- 18. (Currently Amended) The method of claim 17, wherein the 2,4-dichloro-phenoxylacetic 2,4-dichlorophenoxyacetic acid is in at a concentration of about 0.05 mg/l and the kinetin is in at a concentration of about 0.1 mg/l.

This paper is believed to constitute a complete response to the Notice of Non-Compliant Amendment dated January 14, 2005.

Respectfully submitted,

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